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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,044	01/19/2005	Peter Drott	PCT10483US	3988
23122	7590	08/22/2007	EXAMINER	
RATNERPRESTIA			LEE, GILBERT Y	
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VALLEY FORGE, PA 19482-0980			PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/522,044

Applicant(s)

DROTT ET AL.

Examiner

Gilbert Y. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-20 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-20 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/6/07 has been entered.

Claim Rejections - 35 USC § 102

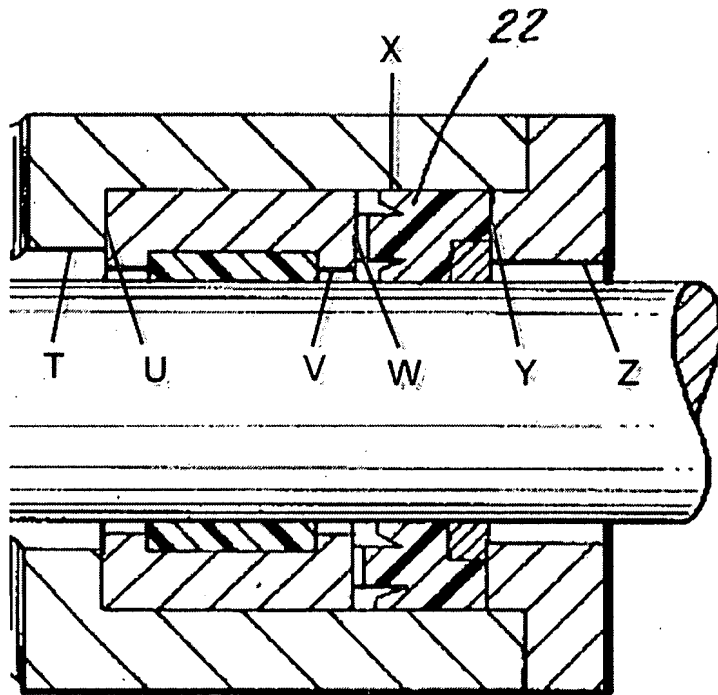
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

For reference characters A-F refer to Examiner's Attachment 1 in PaperNo.

20070625 reference characters T-Z refer to the following figure:

**FIG. 2**

2. Claims 15-20 and 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Zollner (US Patent No. 4,602,791).

Regarding claim 15, the Zollner reference, as best understood, discloses a cylinder-and-piston unit (Col. 1, Lines 5-15) comprising a cylinder (e.g. including 5, D, and upper element 21 in contact with 22), a piston (6) and a sealing collar (22), the cylinder comprising a bore (e.g. bore of cylinder accommodating piston 6), and the cylinder having a wall surface (e.g. inner most surface of cylinder) along the bore, the wall surface comprising a first sidewall (V) extending parallel to a longitudinal axis of the bore (Fig. 2), a second sidewall (W) contiguous with the first sidewall and extending

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generally perpendicularly to the first sidewall (Fig. 2), a third sidewall (X) contiguous with the second sidewall and extending generally parallel to the first sidewall (Fig. 2), a fourth sidewall (Y) contiguous with the third sidewall and extending generally parallel to the second sidewall (Fig. 2), and a fifth sidewall (Z) contiguous with the fourth sidewall and extending generally parallel to the first sidewall along the bore (Fig. 2), the second, third and fourth sidewalls being parts of one unitary body, forming a groove (e.g. groove formed by walls W, X and Y) that is recessed in the wall surface (Fig. 2), the sealing collar being positioned in the groove (Fig. 2) and comprising an outside sealing lip (B) and an inside sealing lip (A), the outside and inside sealing lips each having a free end (i.e. the ends facing downwards in Fig. 2), the sealing collar further including a circumferential extension (C) that extends in parallel to the sealing lips (Fig. 2), being arranged radially between the outside sealing lip and the inside sealing lip and projects axially beyond the free ends of the outside and inside sealing lips (Fig. 2), the circumferential extension being configured to contact the second sidewall in the groove (Fig. 2) and maintain the free ends of the outside and inside sealing lips out of contact with the second sidewall (Fig. 2).

Regarding claim 16, the Zollner reference, as best understood, discloses a cylinder-and-piston unit (Col. 1, Lines 5-15) comprising a cylinder (e.g. including 5, D, and upper element 21 in contact with 22), a piston (6) and a sealing collar (22), the cylinder comprising a bore (e.g. bore of cylinder accommodating piston 6), and the cylinder having a wall surface (e.g. inner most surface of cylinder) along the bore, the wall surface comprising a first sidewall (V) extending parallel to a longitudinal axis of the

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bore (Fig. 2), a second sidewall (W) contiguous with the first sidewall and extending generally perpendicularly to the first sidewall (Fig. 2), a third sidewall (X) contiguous with the second sidewall and extending generally parallel to the first sidewall (Fig. 2), a fourth sidewall (Y) contiguous with the third sidewall and extending generally parallel to the second sidewall (Fig. 2), and a fifth sidewall (Z) contiguous with the fourth sidewall and extending generally parallel to the first sidewall along the bore (Fig. 2), the second, third and fourth sidewalls being parts of one unitary body and forming a groove (e.g. groove formed by walls W, X and Z) that is recessed in the wall surface (Fig. 2), the sealing collar being positioned in the groove (Fig. 2) and comprising a first sealing lip (A) and a second sealing lip (B), the first sealing lip being acted upon dynamically and making contact with the piston (Fig. 2) and the second sealing lip thereof being acted upon statically while resting on a bottom of the groove (Fig. 2), the first and second sealing lips each having a free end (i.e. the ends facing downwards in Fig. 2), the sealing collar further including a circumferential extension (C) that extends between the first and second sealing lips (Fig. 2), and projects from the first and second sealing lips in an axial direction beyond the free ends of the first and second sealing lips (Fig. 2), the sealing collar having a rear surface (e.g. surface of element 22 in contact with element D) opposite the free ends of the first and second sealing lips, wherein the sealing collar has a maximum radial width at the free end of the second sealing lip and a minimum radial width at the rear surface (Fig. 2). Note that the radial width at the rear surface will always be smaller than the maximum width because of supporting ring 1.

Regarding claim 17, the Zollner reference discloses the axial width of the groove being larger than the axial width of the sealing collar (Fig. 2). Note that the axial width of the groove of the Zollner reference is larger than the axial width of the sealing collar at different cross sections.

Regarding claim 18, the Zollner reference discloses the second sealing lip (B). Note that the second lip of the Zollner reference is capable of being passed over by pressure fluid flow and hence provide the effect of a valve, because the structure as claimed in claim 16 is the same as the structure of the Zollner reference.

Regarding claim 19, the Zollner reference discloses the strength of the extension as a difference between its inside and outside diameters has at least the same rate as the strength of each of the sealing lips. Note that the seal of the Zollner reference is made of one material and since the extension has a thicker diameter, it will have a strength that is equal, if not greater, than the strength of the lips.

Regarding claim 20, the Zollner reference discloses the extension being provided with radial apertures (F). Note that the apertures are capable of allowing pressure fluid to pass through in a radial direction.

Regarding claim 22, the Zollner reference discloses the apertures being open in an axial direction towards the free end of the extension (Fig. 2).

Regarding claim 23, the Zollner reference discloses the extension being integrally connected to the sealing collar and being made of the same material (Fig. 2).

Regarding claim 24, the Zollner reference discloses a cylinder-and-piston unit (Col. 1, Lines 5-15) comprising a cylinder (e.g. including 5, D, and upper element 21 in

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contact with 22), a piston (6) and a sealing collar (22), the cylinder comprising a bore (e.g. bore of cylinder accommodating piston 6), and the cylinder having a wall surface (e.g. inner most surface of cylinder) along the bore, the wall surface comprising a first sidewall (V) extending parallel to a longitudinal axis of the bore (Fig. 2), a second sidewall (W) contiguous with the first sidewall and extending generally perpendicularly to the first sidewall (Fig. 2), a third sidewall (X) contiguous with the second sidewall and extending generally parallel to the first sidewall (Fig. 2), a fourth sidewall (Y) contiguous with the third sidewall and extending generally parallel to the second sidewall (Fig. 2), and a fifth sidewall (Z) contiguous with the fourth sidewall and extending generally parallel to the first sidewall along the bore (Fig. 2), the second, third and fourth sidewalls being parts of one unitary body and bordering a groove that is recessed in the wall surface (Fig. 2), the sealing collar being positioned in the groove and comprising an outside sealing lip (B) and an inside sealing lip (A), the outside and inside sealing lips each having a free end (i.e. the ends facing downwards in Fig. 2), the sealing collar further including a circumferential extension (C) that extends in parallel to the sealing lips (Fig. 2), is arranged radially between the outside sealing lip and the inside sealing lip and has a free end that projects axially beyond the free ends of the outside and inside sealing lips (Fig. 2), the circumferential extension engaging the second sidewall of the groove (Fig. 2) and maintaining the free ends of the outside and inside sealing lips out of contact with the second sidewall (Fig. 2).

Regarding claim 25, the Zollner reference discloses the free end of the circumferential extension being provided with radial apertures (F). Note that the apertures are **capable of** allowing pressure fluid to pass through in a radial direction.

Regarding claim 26, the Zollner reference discloses the sealing collar having a rear surface (e.g. surface of element 22 in contact with element 1 that is parallel to the surface of element C in contact with element 21) opposite the free ends of the outside and inside sealing lips, wherein the sealing collar has a maximum outside diameter at the free end of the outside sealing lip and a minimum outside diameter at the rear surface (Fig. 2). Note the minimum outside diameter is the same width as the supporting ring 1 and will always be smaller than the maximum diameter at the outside seal.

Response to Arguments

3. Applicant's arguments filed 8/6/07 have been fully considered but they are not persuasive.

With regards to the applicant's argument of the amended claims, the argument is not persuasive because the added limitations are met by the Zollner reference as rejected above.

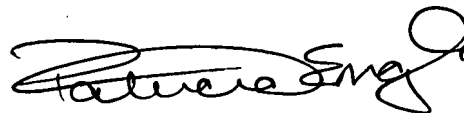
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gilbert Y. Lee whose telephone number is 571-272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GL
August 16, 2007

A handwritten signature in black ink, appearing to read "Patricia Engle", with a stylized flourish at the end.

Patricia Engle
Supervisory Examiner
Tech. Center 3600